

What if Classroom Instruction Becomes a Thing of the Past?

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Abstract

Until recently, there was no doubt about what constituted a university education and how it was carried out. Suddenly, the COVID-19 pandemic occurred, and in a few weeks, not only education, but the entire world changed. In the new normal, post-pandemic world, it is possible that teaching face-to-face courses will be the exception, not the rule, in the U.S. and the Latin American and Caribbean regions. Furthermore, this virtual instruction will possibly be at massive levels with tens or hundreds of thousands of students at a time, modeled after massive open online courses (MOOCs).

Virtual instruction has been present in some form in most institutions of higher education in recent years and its growth has been systematically increasing. In the U.S., the growth in the number of higher education students enrolled exclusively in online courses has been increasing (4% annually for undergraduate students and 7.4% for postgraduate students from 2017-2018). This growth has been even greater in many parts of Latin America and the Caribbean. An article in *El Espectador* entitled “An increasingly less physical education” from January 29, 2018, reported that the growth rate of the virtual modality was on the order of almost 99% in Colombia. In Argentina, distance education has a long history, and currently, institutions such as the Universidad Argentina de la Empresa (UADE) have the virtual modality as an important part of their educational offerings.

Before the pandemic, higher education institutions had already implemented some forms of distance learning for certain courses. However, despite constant growth in this modality, as previously explained, the vast majority of these institutions made only a small fraction of their courses available in a virtual format with the exception of certain institutions that specialized in distance education. COVID-19 ended all resistance to distance learning in just a few weeks. Teachers had no choice but to convert their courses to an online format because, unless a course was converted to a virtual format, it could not otherwise be taught. While there will still be discussions about the effectiveness of virtual delivery after the quarantines are over, the reality is that almost all courses are now available and can be taught online. In the U.S., educational institutions have had to ask themselves whether it is ethical to force students to physically rejoin classes due to the risk of contagion (in addition to considering the possibility of being prosecuted in the event of death by contagion of some student).

The answer seems to be that universities are going to offer courses in both face-to-face and virtual modalities and let the students (and teachers) choose at their own risk. Although the sudden change to virtual instruction surprised many institutions in the U.S. that were not prepared to take up the challenge, Latin America and the Caribbean have had more difficulty adapting to this new format. The biggest change in education could

occur due to the sudden acceptance and respectability of massive and open online courses (MOOCs).

In 2011, Stanford University offered an artificial intelligence course online for free which enrolled 160,000 students from around the world. This greatly impacted one of the teachers, Sebastien Thrun, and led him to found Udacity, the first company to offer this type of course. There are currently many companies such as Coursera, Udemy, and consortia of higher education institutions such as edX that offer MOOC courses. By providing instruction to hundreds of thousands of students around the world, these companies achieve impressive economies of scale and can deliver modern, personalized courses and programs in a short period of time. Until recently, the willingness to give credit for the Coursera MOOC course, "Human-Computer Interaction" offered by the University of Helsinki in 2012 was considered a Finnish rarity. However, many well-respected universities have also started producing their own for-credit MOOCs in the U.S., Latin America and the Caribbean region. In the U.S., MIT created the non-profit MITx in 2012. Harvard, as well as other institutions such as the University of California, Berkeley, the University of Texas System, Boston University, and others, joined the group which has been renamed edX. This shows that large institutions that have a lot of credibility can join forces to produce MOOCs.

In Latin America, the University of Sao Paulo in Brazil (2013) in association with Coursera, and the Autonomous University of Mexico (2019) in association with Veduca, have also started offering MOOCs. Why is this important? A MOOC approach offers the ideal financial model for higher education institutions (the cost per student is very low) and for students (the cost of tuition for the course is very low). A sign of the acceptance of MOOCs is that several of these MOOC providers, for example edX, have even started offering degrees at the graduate level for very affordable tuition prices.

The emergence of MOOCs could change the role of teachers as well. If a comparison were made between the theater (where the play is the final product) and the academy, it could be said that in the current educational model, teachers are the producer, screenwriter, stage director and main actor, all in one. This model is no longer sustainable. Students have become clients, and similar to their demand for attractive and engaging theater works, they demand educational courses that meet their specific individual interests, in an entertaining way, and at very low tuition costs.

An optimistic view sees the role of faculty as that of expert generalists who, similar to a conductor, ensure the harmonious performance of task specialists. A pessimistic view sees the primary role of teachers as that of screenwriters or, if they do not work with the original script, as script adapters or the curators of academic material. Hopefully, some teachers will still be able to teach their own content, or play the role of the lead actor in the educational theater. However, producer organizations are likely to decide who is a "marketable" instructor, or perhaps create, through artificial intelligence techniques, appropriate digital versions of teachers to provide perfect instruction. Great teachers are still needed to impact students in a way that no algorithm can, and therefore, face-to-face instruction will be necessary, but it will be the final measured detail of education, not the workhorse. That is, the time when all higher education students received face-to-face instruction, most of the time, in most courses will be a memory of the past.